X. APPENDIX

1. An improved aluminum alloy with reduced susceptibility to high temperature oxidation, said alloy consisting essentially of: about 0.65-0.9 wt.% silicon, about 4-4.7 wt.% copper, about 0.6-0.9 wt.% manganese, about 0.35-0.55 wt.% magnesium, up to about 0.15 wt.% iron and a balance of aluminum, incidental elements and impurities.

2. The alloy of claim 1 which further contains one or more of: up to about 0.25 wt.% zinc, up to about 0.15 wt.% titanium, up to about 0.1 wt.% chromium, and up to about 0.001wt.% beryllium.

3. The alloy of claim 1 which contains about 0.7-0.85 wt.% silicon.

4. The alloy of claim 1 which contains about 4.1-4.5 wt.% copper.

5. The alloy of claim 1 which contains about 0.65-0.85 wt.% manganese.

6. The alloy of claim 1 which contains about 0.14 wt.% iron or less.

7. The alloy of claim 1 which is suitable for manufacturing into a forged part.

8. The alloy of claim 7 wherein said forged part is a vehicle wheel.

9. The alloy of claim 7 wherein said forged part is an aerospace wheel.

10. The alloy of claim 7 wherein said forged part is an aerospace brake component.

11. The forged part of claim 7 which exhibits an improved T6 fracture toughness greater than 21 ksi √in.

12. A forged aircraft wheel having reduced susceptibility to high temperature oxidation, said wheel made of an alloy composition consisting essentially of: about 0.65-0.9 wt.% silicon, about 4-4.7 wt.% copper, about 0.6-0.9 wt.% manganese, about 0.35-0.55 wt.% magnesium, up to about 0.15 wt.% iron and a balance of aluminum, incidental elements and impurities.

13. The wheel of claim 12 which further contains one or more of: up to about 0.25 wt.% zinc, up to about 0.15 wt.% titanium, up to about 0.1 wt.% chromium, and up to about 0.001wt.% beryllium.

14. The wheel of claim 12 which contains about 0.7-0.85 wt.% silicon.

15. The wheel of claim 12 which contains about 4.1-4.5 wt.% copper.

16. The wheel of claim 12 which contains about 0.65-0.85 wt.% manganese.

17. The wheel of claim 12 which contains about 0.14 wt.% iron or less.

18. The wheel of claim 12 which is an inboard wheel.

19. The wheel of claim 12 which exhibits an improved T6 fracture toughness greater than 21 ksi √in.

20. A forged vehicular brake component having reduced susceptibility to high temperature oxidation, said brake component made of an alloy composition consisting essentially of: about 0.65-0.9 wt.% silicon, about 4-4.7 wt.% copper, about 0.6-0.9 wt.% manganese, about 0.35-0.55 wt.% magnesium, up to about 0.15 wt.% iron and a balance of aluminum, incidental elements and impurities.

21. The brake component of claim 20 which further contains one or more of: up to about 0.25 wt.% zinc, up to about 0.15 wt.% titanium, up to about 0.1 wt.% chromium, and up to about 0.001wt.% beryllium.

22. The brake component of claim 20 which contains about 0.7-0.85 wt.% silicon.

23. The brake component of claim 20 which contains about 4.1-4.5 wt.% copper.

24. The brake component of claim 20 which contains about 0.65-0.85 wt.% manganese.

25. The brake component of claim 20 which contains about 0.14 wt.% iron or less.

26. The brake component of claim 20 which exhibits an improved T6 fracture toughness greater than 21 ksi $\sqrt{in}$.

27. The brake component of claim 20 which is a piston housing.